Amendments to the Claims:

Listing of Claims:

1. - 8. (Canceled)

9. (Currently Amended) ~~A compression ignition~~ An apparatus comprising:

a diesel engine;

means for controlling an operating mode of the engine; and

an engine exhaust system comprising a catalyst comprising palladium (Pd) supported on a support material and at least one base metal promoter, wherein the operating mode is defined when substantially all fuel for combustion in the engine is injected into a combustion chamber of the engine prior to the start of combustion during at least a portion of an engine cycle, and wherein an engine-out exhaust gas produced during the operating mode comprises >2000ppm carbon monoxide~~which engine comprising an exhaust system comprising a supported palladium (Pd) catalyst and at least one base metal promoter~~.

10. (Canceled)

11. (Currently Amended) An ~~engine~~ apparatus according to claim 9, ~~or 10, producing~~ wherein the engine-out exhaust gas ~~comprising~~ produced by the engine operated in the mode wherein substantially all fuel for combustion in the engine is injected into a combustion chamber of the engine prior to the start of combustion during at least a portion of an engine cycle further comprises >500ppm C_1 unburned hydrocarbons ~~(HC)~~.

12. (Currently Amended) An ~~engine~~ apparatus according to claim 9, ~~10 or 11, producing exhaust gas of~~ wherein a temperature of the engine-out exhaust gas produced by the engine operated in the mode wherein substantially all fuel for combustion in the engine is injected into a combustion chamber of the engine prior to the start of combustion during at least a portion of an engine cycle is below 250°C ~~in temperature~~.

13. (Currently Amended) An ~~engine~~ apparatus according to ~~any of claims 9 to 13~~ claim 9, wherein the at least one base metal promoter is selected from the group consisting of a

reducible oxide; ~~or~~ a basic metal; ~~or any mixture~~ and mixtures of any two or more thereof.

14. (Currently Amended) An ~~engine~~ apparatus according to claim 13, wherein the ~~at least one~~ reducible oxide is an oxide selected from the group consisting of manganese, iron, cobalt, copper, tin, ~~or~~ and cerium.

15. (Currently Amended) An engine according to claim ~~13~~ 14, wherein the at least one reducible oxide is ~~at least one~~ selected from the group consisting of MnO_2, Mn_2O_3, Fe_2O_3, CuO, CoO, SnO_2 and CeO_2.

16. (Currently Amended) An engine according to claim 13, ~~14 or 15,~~ wherein the reducible oxide is dispersed on the support material.

17. (Currently Amended) An engine according to claim 13, ~~14 or 15,~~ wherein the support ~~per se~~ comprises particulate bulk reducible oxide.

18. (Currently Amended) An ~~engine~~ apparatus according to claim 13, wherein the at least one basic metal is selected from the group consisting of:

an alkali metal~~,~~ selected from the group consisting of sodium, potassium and caesium,

an alkaline earth metal selected from the group consisting of barium, magnesium, calcium and strontium, ~~or~~

a lanthanide metal comprising lanthanum, ~~or any mixture,~~ and

mixtures, compound ~~oxide~~ oxides or mixed ~~oxide~~ oxides of any two or more thereof.

19. - 21. (Canceled)

22. (Currently Amended) An ~~engine~~ apparatus according to ~~any of claims 9 to 21~~ claim 9, wherein the catalyst comprises platinum (Pt)~~, optionally supported Pt~~.

23. (Currently Amended) An ~~engine~~ apparatus according to claim ~~22~~ 49, wherein the Pd and Pt are both supported on the same support material.

24. (Currently Amended) An ~~engine~~ apparatus according to claim ~~22~~ 49, wherein the catalyst comprises an arrangement selected from the group consisting of:

(i) the supported Pd and the at least one base metal promoter ~~are disposed~~ on a first substrate monolith and ~~the~~ supported Pt ~~is disposed~~ on a second substrate monolith, ~~which~~ wherein the second substrate monolith is disposed downstream of the first substrate monolith;

(ii) the supported Pd and the at least one base metal promoter on an upstream part of a substrate of a substrate monolith and the supported Pt on a downstream part of the substrate monolith;

(iii) the supported Pt in a first layer on a substrate and the supported Pd and the at least one base metal promoter are disposed in a second layer overlying the first layer; and

(iv) a substrate monolith comprising a single layer wherein the Pd and the at least one base metal promoter are supported on a first support material and the Pt is supported on a second support material.

25. - 27. (Canceled)

28. (Currently Amended) An ~~engine~~ apparatus according to ~~any of claims 9 to 27~~ claim 9, wherein the Pd or Pt support ~~and, where present, the Pt support comprises at least one~~ material is selected from the group consisting of alumina~~,~~; silica-alumina~~,~~; ceria~~,~~; magnesia~~,~~; titania~~,~~; zirconia~~,~~; a zeolite~~;~~ ~~or a mixture~~ and mixtures, composite ~~oxide~~ oxides or mixed ~~oxide~~ oxides of any two or more thereof.

29. - 32. (Canceled)

33. (Currently Amended) An ~~engine~~ apparatus according to ~~any of claims 9 to 32~~ claim 9, wherein the catalyst contains from 0.1 to ~~30%, optionally from 0.5-15% and preferably 1-5%~~ 30.0% by combined weight of ~~PGM~~ platinum group metal based on the total weight of ~~the~~ supported catalyst.

34. (Currently Amended) An ~~engine~~ apparatus according to claim ~~33~~ 22, wherein the catalyst contains a weight ratio of from 100:0 to 10:90 Pd:Pt.

35. (Currently Amended) An ~~engine~~ apparatus according to ~~claim 33 or 34~~ claim 49, ~~wherein the catalyst contains~~ comprising from 0.1 to 10.0% Pt by weight and from 0.1 to 2.0% by weight based on the total weight of ~~the~~ the supported part of the catalyst ~~and from 0.1 to 20% by weight based on the total weight of the catalyst~~.

36. - 39 (Canceled)

40. (Currently Amended) An ~~engine~~ apparatus according to claim ~~39~~ 9, wherein the exhaust system further comprises ~~an optionally catalysed~~ a particulate filter disposed downstream of the supported Pd ~~catalyst~~.

41. - 43 (Canceled)

44. (Original) A ~~diesel engine according to claim 43, wherein it is a~~ homogeneous charge compression ignition (HCCI) diesel engine or a Dilution Controlled Combustion System (DCCS) diesel engine according to claim 9.

45. (Canceled)

46. (Canceled)

47. (New) An apparatus according to claim 9, wherein the control means controls the engine to operate in a conventional direct injection diesel engine mode during a portion of the engine cycle.

48. (New) An apparatus according to claim ~~10~~ 47, wherein the portion of the engine cycle wherein the engine is controlled to operate in the conventional direct injection diesel engine mode comprises high engine load.

49. (New) An apparatus according to claim 22, wherein the Pt is supported on a support material.

50. (New) An apparatus according to claim 22, wherein the catalyst comprises an arrangement selected from the group consisting of:

(i) the supported Pd and the at least one base metal promoter on a first substrate monolith and the Pt on a second substrate monolith, wherein the second substrate monolith is disposed downstream of the first substrate monolith;

(ii) the supported Pd and the at least one base metal promoter on an upstream part of a substrate monolith and the Pt on a downstream part of the substrate monolith; and

(iii) the Pt in a first layer on a substrate monolith and the supported Pd and the at least one base metal promoter disposed in a second layer overlying the first layer.

51. (New) An apparatus according to claim 49, wherein the catalyst contains from 0.1 to 30.0% by combined weight of platinum group metal based on the total weight of supported catalyst.

52. (New) A process for treating engine-out exhaust gas containing >2000ppm carbon monoxide from a diesel engine operated in a mode wherein substantially all fuel for combustion is injected into a combustion chamber prior to the start of combustion, which process comprising contacting the exhaust gas with a catalyst comprising palladium supported on a support material and at least one base metal promoter.